



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,964	07/28/2003	Todd M. Shail	11-934	2266
23117	7590	04/01/2005	EXAMINER	
NIXON & VANDERHYE, PC			YAO, SAMCHUAN CUA	
1100 N GLEBE ROAD			ART UNIT	
8TH FLOOR			PAPER NUMBER	
ARLINGTON, VA 22201-4714			1733	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/627,964	SHAIL ET AL.	
	Examiner	Art Unit	
	Sam Chuan C. Yao	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10-22-03&1-7-05</u> | 6) <input type="checkbox"/> Other: _____ |

W

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reith (US 4,844,765) in view of (Werenicz et al (US 5,827,252) or Janssen (US 6,843,874)), Brumbelow et al (US 2002/0134486 A1), and optionally further in view of Crandall et al (US 5,1316,838).

With respect to claims 10-11, Reith discloses a process of making a carpet, the process comprises forming a tufted primary backing; providing a secondary backing; applying 1st and 2nd hot-melt adhesive layers between the primary backing and the secondary backing; heat-pressing the layers together to soften the hot-melt adhesive layers without damaging the backing layers (col. 1 lines 19-36; col. 2 lines 3-31; col. 4 line 59 to col. 5 line 39; col. 6 lines 10-35; col. 9 line 41 to col. 11 line 18). While Reith teaches forming a hot-melt adhesive sheet using a die gap coater (col. 12 lines 19-31), Reith does not teach slot-coating a hot-melt adhesive an underside surface of a primary backing. However, it would have been obvious in the art to slot-coat a hot-melt adhesive to an underside surface of a primary backing in a process taught by Reith, because: a) it is a notoriously common practice in the art to slot coat a hot-melt adhesive to a 1st

substrate in-situ and then to adhesively bond a 2nd substrate to an adhesive coated 1st substrate as exemplified in the teachings of either (Werenicz et al (col. 9 lines 25-46; figure 1) or Janssen (col. 4 lines 34-47; col. 5 lines 1-60; figures 1A-3); b) it is also well known in the art to coat continuously a hot-melt adhesive onto an underside surface of a primary backing using a die-slot coater and then to adhesively bond a secondary backing to the adhesive coated underside surface of a primary backing as exemplified in the teachings of Brumbelow et al (numbered paragraph 107; figures 2 and 6-7); and optionally, it is a common practice in the hot-melt adhesive coating art to interchangeably use "*slot orifice coaters*" and "*extrusion coaters*" for applying a hot-melt adhesive coating onto a substrate as exemplified in the teachings of Crandall et al (col. 10 lines 15-38). An incentive for one in the art to apply a hot-melt adhesive using a slot-coater in-situ to an underside surface of a primary backing would have simply been to obtain a self-evident advantage of obviating the need to form adhesive sheets in a different production line, thereby enhancing a production efficiency and reducing production cost.

With respect to claim 1, Reith teach applying two separate adhesive sheets or applying a composite sheet comprising a 1st and 2nd adhesive layers (col. 5 lines 15-23). As noted earlier, it is old in the art to slot-coat a hot melt adhesive onto a surface of 1st substrate in-situ, before a 2nd substrate is adhesively bonded to the 1st substrate. Moreover, it also old in the art to apply a series of thermoplastic layers using a series of die-coaters to a primary backing before a secondary

Art Unit: 1733

backing is applied as exemplified in the teachings of Brumbelow et al (numbered paragraph 172-178; figure 7). It would have been obvious in the art to provide a series of slot coaters to apply in-situ 1st and 2nd hot melt adhesive layers onto an underside surface of a primary backing in order to form a carpet continuously of Reith.

With respect to claims 2 and 4, since it is a notoriously common practice in the art to incorporate a tackifying resin to a hot-melting adhesive, these claims would have been obvious in the art. Also see column 8 lines 37-62 of the Reith patent. Note: claim 4 reads on zero amount of tackifying agent being added into a 2nd coating composition.

With respect to claims 3 and 5-6, the recited amounts of hot melt adhesive in these claims are taken to be conventional in the art. Moreover, one in the art would have determined, by routine experimentation, a suitable amount hot-melt adhesive in forming a carpet of Reith. For these reasons, these claims would have been obvious in the art.

With respect to claims 7-8, see column 7 line 60 to column 8 line 5 of the Reith patent.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 2 above as applied to claim 1 above, and further in view of Fink (US 5,728,444).

Since it is well known in the art to form a carpet which is made from a fully recyclable thermoplastic material as exemplified in the teachings of Fink

Art Unit: 1733

(abstract; col. 4 lines 16-65; col. 7 line 65 to col. 8 line 67; figures 5-6), this claim would have been obvious in the art.

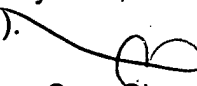
Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
03-28-05